

WHAT IS CLAIMED IS:

1. A connector comprising a housing (30) with at least one cavity (31) for receiving a terminal fitting (10; 10A) in an inserting direction (ID), a lock (40; 40A) cantilevered substantially along a longitudinal from a side wall (35) of the cavity (31), the terminal fitting (10; 10A) resiliently deforming the lock (40; 40A) during insertion into the cavity (31) and the lock (40; 40A) being restored to engage and lock the terminal fitting (10; 10A) when the terminal fitting (10; 10A) is inserted by a specified distance, wherein the lock (40; 40A) comprises a deformation permitting portion (52) for permitting such a resilient deformation that a length (L0) of the lock (40; 40A) becomes shorter (L1) when a compressive force acts on the lock (40; 40A) substantially along the longitudinal direction.
2. The connector of claim 1, wherein the lock (40; 40A) is restored to engage the leading end (45) of the lock (40; 40A) with the terminal fitting (10; 10A).
3. The connector of claim 1, wherein the deformation permitting portion (52) comprises a thinner portion (52) at a part of the lock (40; 40A) along the longitudinal direction.
4. The connector of claim 1, wherein a locking projection (23) is formed on a side surface of the terminal fitting (10; 10A) substantially facing the lock (40; 40A) to increase an area of engagement with the lock (40; 40A).

5. The connector of claim 4, wherein the lock (40; 40A) is recessed to form an insertion groove (49) for permitting the passage of the locking projection (23) when the terminal fitting (10; 10A) is inserted while resiliently deforming the lock (40; 40A), the deformation permitting portion (52) being formed by making the insertion groove (49) deeper at one part along the longitudinal direction.

6. The connector of claim 5, wherein the insertion groove (49) is formed to be deeper by setting an inclination of a bottom (50) thereof slightly steeper than that of a surface (43) of the lock (40; 40A) substantially opposite to the surface where the insertion groove (49) is formed.

7. The connector of claim 1, wherein the deformation permitting portion (52) comprises a portion having a reduced cross-sectional area.

8. The connector of claim 1, wherein the deformation permitting portion (52) is provided at a base where the lock (40; 40A) projects from the side wall (35) substantially in the inserting direction (ID).

9. The connector of claim 1, wherein a bent portion (52A) of the deformation permitting portion (52) contacts a corresponding portion of the side wall (35) to strut the lock (40; 40A) thereon when a compressive force acts on the lock (40; 40A) substantially along the longitudinal direction.

10. The connector of claim 1, wherein the terminal fitting (10A) is formed at a wall (19) substantially facing the lock (40; 40A) with a cut-away portion (21) for engaging the lock (40; 40A), sections of the wall (19) before and behind the cut-away portion (21) being connected by a coupling (60) located at one side of the wall (19), and the lock (40; 40A) having an escaping portion (65) for the coupling (60).

11. A connector comprising a housing (30) with opposite front and rear ends and at least one cavity (31) extending between the front and rear ends, the cavity (31) having a side wall (35) and a resiliently deformable lock (40; 40A) cantilevered forwardly in the cavity (31) from the side wall (35), the lock (40; 40A) having a base end at the side wall (35) and a free end (45) remote from the side wall (35), a deformation permitting portion (52) being formed on the lock (40; 40A) near the base end and having a reduced cross-section as compared to other portions of the lock (40; 40A), such that the lock (40; 40A) deforms resiliently at the deformation permitting portion (52) and shortens in response to a compressive force exerted rearwardly on the lock (40; 40A).

12. The connector of claim 11, wherein the lock (40; 40A) is recessed to form a longitudinally extending insertion groove (49), the deformation permitting portion (52) being formed by making the insertion groove (49) deeper at one part along the longitudinal direction.

13. The connector of claim 12, wherein the insertion groove (49) is formed to be deeper by setting an inclination of a bottom (50) thereof slightly steeper than that of a surface (43) of the lock (40; 40A) substantially opposite to the surface where the insertion groove (49) is formed.

14. The connector of claim 11, the deformation permitting portion (52) is configured such that a bent portion (52A) thereof contacts a corresponding portion of the side wall (35) to strut the lock (40; 40A) thereon when a rearward compressive force acts on the lock (40; 40A).